

## **AMENDMENTS**

### **IN THE CLAIMS:**

*Please cancel claims 11 and 20; amend claims 1-2, 12-15, 17, and 19; and accept for consideration new claims 21-22 as follows:*

1. (Currently Amended) A method of generating, using a device having a processor, a presentation of an application comprising elements to be displayed on a display component, the method comprising:
  - executing on the processor instructions configured to:
    - identify a pixel density of the display component;
    - for respective elements of the presentation:
      - from a scale factor set, select a scale factor that is closest to having a pixel density range including the pixel density of the display component,
      - wherein the scale factor is different from the pixel density of the display component; and
      - request the element application to generate provide a scaled selected representation of the element using the scale factor; and
      - generate the presentation comprising the scaled selected representations of the elements received from the application.
2. (Currently Amended) The method of claim 1, wherein:
  - the display component is accessible to the device; and
  - identifying the pixel density of the display component further comprises[[ing]]:
    - querying the display component to report the pixel density.
3. (Original) The method of claim 1, the scale factor set comprising:
  - a first scale factor selected based on a first pixel density range comprising at least a first pixel density and a second pixel density; and
  - a second scale factor selected based on a second pixel density range comprising at least a third pixel density and a fourth pixel density.

4. (Original) The method of claim 1:  
respective elements having a native size; and  
respective scale factors specified as a percentage of the native size of the  
element.
5. (Original) The method of claim 4, the scale factor set comprising:  
a first scale factor having a percentage greater than 100%; and  
a second scale factor having a percentage less than 100%.
6. (Original) The method of claim 1:  
the presentation comprising a target size; and  
the scale factor set comprising:  
a first scale factor selected to present the presentation at the target size  
on a first display component having a first pixel density; and  
a second scale factor selected to present the presentation at the target  
size on a second display component having a second pixel density.
7. (Original) The method of claim 1:  
the presentation comprising an element grid; and  
the scale factor selected to size the elements according to the element grid.
8. (Original) The method of claim 7:  
the element grid comprising respective pixel boundaries; and  
the scale factors selected to, for elements of an element type having a native  
size, scale the elements to match the pixel boundaries of the element grid.

9. (Original) The method of claim 1:  
the device having a set of pixel dimensions; and  
selecting the scale factor comprising: from the scale factor set, selecting a scale factor based on the pixel density and the pixel dimensions of the device.
10. (Original) The method of claim 1:  
the device having a user scale factor selected by a user of the device; and  
selecting the scale factor comprising: from the scale factor set, selecting a scale factor based on the user scale factor and the pixel density.
11. (Canceled)
12. (Currently Amended) The method of claim 1:  
at least one element storing, for respective scale factors, scaled a representation[[s]]  
of the element at respective associated with the scale factor[[s]]; and  
requesting the element application to generate provide a scaled representation  
of the element comprising: retrieving from the element the scaled representation [[at]]  
associated with the scale factor.

13. (Currently Amended) The method of claim 1:  
the device having a ~~sealed~~ representation cache; and  
requesting an element to ~~generate~~ provide a ~~sealed~~ representation of an element  
comprising:

querying the ~~sealed~~ representation cache for a ~~sealed~~ representation of  
the element associated with the scale factor;

upon locating the ~~sealed~~ representation in the ~~sealed~~ representation  
cache, retrieving the ~~sealed~~ representation from the ~~sealed~~ representation cache; and

upon failing to locate the ~~sealed~~ representation in the ~~sealed~~  
representation cache:

requesting the application ~~element~~ to generate the ~~sealed~~  
representation of the element using the scale factor; and

upon receiving the representation of the element from the  
application, storing the ~~sealed~~ representation of the element associated with the scale  
factor in the scaled representation cache.

14. (Currently Amended) The method of claim 1:  
respective elements having an element type;  
requesting the application ~~elements~~ to ~~generate~~ provide a ~~sealed~~ representation  
of an element comprising:

requesting the application ~~elements~~ of a first element type to generate a  
scaled representation of the elements of a first element type, and

refraining from requesting the ~~elements of a second element type~~  
application to generate a scaled representation of the elements of a second element  
type; and

generating the presentation comprising: ~~generating the presentation comprising:~~  
the scaled representations of the elements of the first element type, and  
unscaled representations of the elements of the second element type.

15. (Currently Amended) The method of claim 14:  
the presentation having at least two presentation contexts; and  
generating the presentation comprising:  
while the presentation is in a first presentation context, generating the presentation comprising the ~~sealed~~ representations of the elements of the first element type provided by the application; and  
while the presentation is in a second presentation context, generating the presentation comprising unscaled representations of the elements of the second element type.
16. (Original) The method of claim 15:  
the first presentation context comprising a touch-responsive presentation of the display component that is responsive to fingertip input of a fingertip of a user;  
the scale factors selected to scale touch-responsive elements of the touch-responsive presentation to facilitate fingertip input; and  
the second presentation context comprising a touch-unresponsive presentation of the display component.

17. (Currently Amended) The method of claim 1, the instructions configured to, upon receiving a request to present the presentation on a second pixel density that is different from the pixel density:

for respective elements:

identify the second pixel density of the display component;

from a scale factor set, select a second scale factor based on the second pixel density; and

request the ~~element~~ application to generate a second ~~scaled~~ representation of the element using the second scale factor; and

generate a second presentation comprising the second ~~scaled~~ representations of the elements provided by the application.

18. (Original) The method of claim 1:

the display component accessible to a second device in communication with the device;

identifying the pixel density comprising: receiving the pixel density of the display component from the second device; and

the instructions configured to send the presentation to the second device to be displayed on the display component.

19. (Currently Amended) A method of presenting elements for a presentation of an application on a display component of a device having a processor, the method comprising:

sending to the device instructions that, when executed on the processor, cause the device to:

identify a pixel density of the display component;

from a scale factor set, select a scale factor that is closest to ~~based on~~ the pixel density of the display component, wherein the scale factor is different from the pixel density of the display component;

request the application ~~respective elements~~ to ~~generate~~ provide, for respective elements of the presentation, a scaled representation of the element using the scale factor; and

present on the display component ~~[[a]]~~ the presentation of the application comprising the ~~scaled~~ representations of the elements received from the application.

20. (Canceled)

21. (New) The method of claim 1, wherein generate the presentation further comprises: generating the presentation comprising the selected representations of the elements received from the application and without rescaling the selected representations according to the pixel density of the display component.

22. (New) A nonvolatile computer-readable storage device comprising instructions that, when executed on a processor of a device comprising a display component having a pixel density, present a presentation of an application comprising at least one element, by:

- identifying a pixel density of the display component;

- from a scale factor set, select a scale factor that is closest to the pixel density of the display component, wherein the scale factor is different from the pixel density of the display component;

- requesting the application to provide, for respective elements of the presentation, a representation of the element using the scale factor; and

- presenting on the display component the presentation of the application comprising the representations of the elements received from the application.



**REMARKS**

Claims 1-20 are pending in the present application. In the Non-Final Office Action of April 11, 2013:

- An objection has been raised with respect to claim 2.
- Claim 20 has been rejected under 35 U.S.C. § 101 for allegedly providing non-statutory subject matter.
- Claims 1-4, 6, 9-11, 14, 17, and 19 have been rejected under 35 U.S.C. § 102(b) in view of the Non-Patent Literature (NPL) document entitled "Writing DPI-Aware Win32 Applications" (*hereinafter* "Haveson").
- Claim 5 has been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2003/0095135 (*hereinafter* "Kaasila").
- Claims 7-8 and 12 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2006/0158451 (*hereinafter* "Barenbrug").
- Claims 13 and 20 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent No. 7,525,551 (*hereinafter* "Newhall").
- Claims 15-16 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2004/0075671 (*hereinafter* "Vale").
- Claim 18 has been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2008/0030425 (*hereinafter* "Fullerton").

In view of the Non-Final Office Action of April 11, 2013, claims 11 and 20 are hereby canceled; claims 1-2, 12-15, 17, and 19 are hereby amended; and new claims 21 and 22 are presented for consideration. It is to be appreciated that while reference may be made back to certain parts of the application in this Reply (e.g., page numbers, line numbers, Figs., etc.), such referencing is not to be interpreted in a limiting manner (e.g., to limit the scope of the claims and/or features therein to the particular portion(s) referenced), but is instead merely done for purposes of explanation, illustration and/or ease of understanding. Reconsideration of the application in light of the following remarks is respectfully requested.

**I. OBJECTION TO CLAIM 2**

In the Non-Final Office Action of April 11, 2013, an objection has been raised with respect to claim 2.

Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 2, as amended herein, provides as follows:

2. The method of claim 1, wherein:  
the display component is accessible to the device; and  
identifying the pixel density of the display component further  
comprises: querying the display component to report the pixel density.

It is respectfully submitted that the amendments to claim 2 provided herein address the basis of this objection. Withdrawal of the objection is therefore requested.

**II. REJECTION OF CLAIM 20 UNDER 35 U.S.C. § 101**

In the Non-Final Office Action of April 11, 2013, claim 20 has been rejected under 35 U.S.C. § 101 for allegedly providing non-statutory subject matter.

Claim 20 is hereby canceled.

Additionally, new claim 22 is directed to the general class of statutory devices a computer-readable media, as was claim 20. However, claim 22 more specifically provides in relevant portion (emphasis added):

22. A nonvolatile computer-readable storage device comprising instructions that, when executed on a processor of a device comprising a display component having a pixel density, present a presentation of an application comprising at least one element, by:...

It is respectfully submitted that claim 22, as amended herein, provides only statutory subject matter and is allowable under 35 U.S.C. § 101. Allowance of claim 22 is therefore respectfully requested.

**III. REJECTION OF CLAIMS 1-4, 6, 9-11, 14, 17, AND 19 UNDER  
35 U.S.C. § 102(b)**

In the Non-Final Office Action of April 11, 2013, claims 1-4, 6, 9-11, 14, 17, and 19 have been rejected under 35 U.S.C. § 102(b) in view of the Non-Patent Literature (NPL) document entitled “Writing DPI-Aware Win32 Applications” (*hereinafter* “Haveson”).

Claim 11 is hereby canceled. With respect to claims 1-4, 9-10, 14, 17, and 19, withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 1, as amended herein, provides in relevant portion as follows (emphasis added):

1. A method of generating, using a device having a processor, a presentation of an application comprising elements to be displayed on a display component, the method comprising:
  - executing on the processor instructions configured to:
    - identify a pixel density of the display component;
    - for respective elements of the presentation:
      - from a scale factor set, select a scale factor that is closest to the pixel density of the display component, wherein the scale factor is different from the pixel density of the display component; and
      - request the application to provide a selected representation of the element using the scale factor; and
      - generate the presentation comprising the selected representations of the elements received from the application.

Claim 19 provide similar portions similar to those emphasized above in claim 1. It is respectfully submitted that at least these portions of claims 1 and 19 are allowable under 35 U.S.C. § 102(b) for at least the following reasons.

The Haveson reference describes techniques for configuring a device to communicate with an application to utilize visual elements (such as fonts and icons) in a manner that is tailored to the current dots-per-inch (“DPI”) setting of a display of the device. It may be appreciated that Haveson describes the techniques utilized in the Windows 7 operating environment, and that the present disclosure relates to the presentation of visual elements of an application in a manner that may present some advantages with respect to the techniques used in Windows 7. For example, in a model where the application is requested to provide visual elements that match the current DPI of the device display, it may not be feasible to provide visual elements that are natively suited for every conceivable DPI (*e.g.*, storing a native representation of a font at every valid DPI). The Haveson reference recommends that developers may overcome this limitation by storing a small set of native representations, and fulfilling a request for a specified DPI by selecting the stored representation that is closest to the specified DPI, and then proportionally scaling the representation to the specified DPI.

The present disclosure seeks to avoid the artifacts of scaling by limiting the model to a small, selected set of DPIs. In this model, the device only requests elements matching one of the small set of selected DPIs. Applications may fulfill requests by storing versions of the visual elements matching each DPI of the DPI set, and providing the visual element matching the specified DPI, preferably without utilizing rescaling that may diminish the visual quality of the elements.

In view of this difference, it is noted that Haveson recommends requesting the application to provide elements scaled to the detected pixel density of the display (and recommending that applications do so by choosing a representation of the element that is close to the detected pixel density, and then rescaling it to match the detected pixel density). By contrast, claims 1 and 19 provide: selecting a scale factor that is closest to the pixel density of the display component (and different from the pixel density of the display component); requesting the application to provide a representation of the element at the selected scale factor; and presenting the elements provided by the application on the display as part of the presentation of the application. Claim 21 further provides that the device refrains from rescaling the representation to match the pixel density of the display.

For at least these reasons, it is respectfully submitted that claims 1 and 19, as amended herein, are allowable under 35 U.S.C. § 102(b) in view of Haveson. Additionally, because claims 2-4, 9-10, 14, and 17 depend from claim 1, and because these claims are also allowable under 35 U.S.C. § 102(b) in view of Haveson. Withdrawal of this rejection is therefore respectfully requested.

**IV. REJECTION OF CLAIM 5 UNDER 35 U.S.C. § 103(a)**

In the Non-Final Office Action of April 11, 2013, claim 5 has been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2003/0095135 (*hereinafter* “Kaasila”).

Withdrawal of this rejection is respectfully requested for at least the following reasons.

Reference is made to the arguments presented herein with respect to the rejection of claim under 35 U.S.C. § 102(b) in view of Haveson. It is respectfully submitted that Kaasila does not supplement the deficiencies in teaching of Haveson with respect to claim 1. While it is appreciated that Kaasila has not been cited for this purpose, it is respectfully submitted that because claim 5 depends from claim 1, claim 5 is necessarily allowable under 35 U.S.C. § 103(a) in view of Haveson and Kaasila. Withdrawal of this rejection is therefore respectfully requested.

**V. REJECTION OF CLAIMS 7-8 AND 12 UNDER 35 U.S.C. § 103(a)**

In the Non-Final Office Action of April 11, 2013, claims 7-8 and 12 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2006/0158451 (*hereinafter* “Barenbrug”).

Withdrawal of this rejection is respectfully requested for at least the following reasons.

Reference is made to the arguments presented herein with respect to the rejection of claim under 35 U.S.C. § 102(b) in view of Haveson. It is respectfully submitted that Barenbrug does not supplement the deficiencies in teaching of Haveson with respect to claim 1. While it is appreciated that Barenbrug has not been cited for this purpose, it is respectfully submitted that because claims 7-8 and 12 depend from claim 1, these claims are necessarily allowable under 35 U.S.C. § 103(a) in view of Haveson and Barenbrug. Withdrawal of this rejection is therefore respectfully requested.

**VI. REJECTION OF CLAIMS 13 AND 20 UNDER 35 U.S.C. § 103(a)**

In the Non-Final Office Action of April 11, 2013, claims 13 and 20 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent No. 7,525,551 (*hereinafter* "Newhall").

Claim 20 is hereby canceled. With respect to claim 13, withdrawal of this rejection is respectfully requested for at least the following reasons.

Reference is made to the arguments presented herein with respect to the rejection of claim under 35 U.S.C. § 102(b) in view of Haveson. It is respectfully submitted that Newhall does not supplement the deficiencies in teaching of Haveson with respect to claim 1. While it is appreciated that Newhall has not been cited for this purpose, it is respectfully submitted that because claim 13 depends from claim 1, this claim is necessarily allowable under 35 U.S.C. § 103(a) in view of Haveson and Newhall. Withdrawal of this rejection is therefore respectfully requested.

**VII. REJECTION OF CLAIMS 15-16 UNDER 35 U.S.C. § 103(a)**

In the Non-Final Office Action of April 11, 2013, claims 15-16 have been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2004/0075671 (*hereinafter* "Vale").

Withdrawal of this rejection is respectfully requested for at least the following reasons.

Reference is made to the arguments presented herein with respect to the rejection of claim under 35 U.S.C. § 102(b) in view of Haveson. It is respectfully submitted that Vale does not supplement the deficiencies in teaching of Haveson with respect to claim 1. While it is appreciated that Vale has not been cited for this purpose, it is respectfully submitted that because claims 15-16 depend from claim 1, these claims are necessarily allowable under 35 U.S.C. § 103(a) in view of Haveson and Vale. Withdrawal of this rejection is therefore respectfully requested.



**VIII. REJECTION OF CLAIM 18 UNDER 35 U.S.C. § 103(a)**

In the Non-Final Office Action of April 11, 2013, claim 18 has been rejected under 35 U.S.C. § 103(a) in view of Haveson and U.S. Patent Application Publication No. 2008/0030425 (*hereinafter* "Fullerton").

Withdrawal of this rejection is respectfully requested for at least the following reasons.

Reference is made to the arguments presented herein with respect to the rejection of claim under 35 U.S.C. § 102(b) in view of Haveson. It is respectfully submitted that Fullerton does not supplement the deficiencies in teaching of Haveson with respect to claim 1. While it is appreciated that Fullerton has not been cited for this purpose, it is respectfully submitted that because claim 18 depends from claim 1, this claim is necessarily allowable under 35 U.S.C. § 103(a) in view of Haveson and Fullerton. Withdrawal of this rejection is therefore respectfully requested.

**IX. CONCLUSION**

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-5088, **333246.01**.

Respectfully submitted,

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